SUPPLY CHAIN MANAGEMENT AND STRATEGIES FOR THE CONTINUAL IMPROVEMENT IN THE BUSINESS PROCESS

Fatima Zakir^{1*}, Ali Rehman², Muhammad Adnan Alvi¹

¹School of Economics and Management, Beihang University, Beijing, PR China ²School of Automation Science and Electrical Engineering, Beihang University, Beijing, PR China Correspondent Email: fatimazakir82@gmail.com

ABSTRACT: Supply Chain Management has significantly changed the way of organizations deal with their Business by adopting such processes which could increase the process efficiency, cut the cost and improve the structure of the organization. The Literature Survey led to formulate the very much concept of the revised model of Supply Chain process of Pakistan International Airlines. Business process improvement provides the strategies to the organization, to deal with the in the best way. After the Second World War the significance of the business process highlighted. People adopted the new tools to improve the business process and with the passage of time these things become important for the business. Globalization can increase the scopes of chances for well-settled industry like the communications, textile, computers, automotive, airlines and semi-conductors industries. Before that, economies on a national level were separated from each other but now national economies are uniting together to platform of Global Economic System [1].

Keywords: Supply Chain Management, Business Process Improvement, Supply Chain Process

.INTRODUCTION

It is observed that as business flows towards the markets foreign countries in a way to expand the share of market or when business tends to shift its facilities of production to the regions having lowest cost. The purpose of his research is to accommodate a strategy for the continual improvement in the business process, which is based upon on their execution measurement and realization with services. It contains the improving procedure to accumulate the business improvements and services. Business process improvement (BPI) has acquired the prominent tool to achieve higher quality at reduced cycle time and cost organizations of 21st century are seeking to maximize its underlying procedures. 45% organizations are expecting to increase connections in BPI projects which are revealed in a recent survey. Projects of Business process improvement can be regarded as the most prominent proofs to prove the spending of information technology. The increasing number of BPI projects brings an imperative for managers. The potential performance improvement must be assessed before project initiation. While performance improvements from a BPI project may be observed along many dimensions such as reduced cost and/or time, better quality, increased productivity, etc., tracking performance along these metrics requires appropriate management control methods that enable precise measurement. In other words, quantitative assessment of process performance is an integral component of BPI success. While modern businesses increasingly focus on BPI, two of the top ten reasons for unsuccessful BPI initiatives concern the absence of proper measurements - a lack of well-defined performance measures and a lack of monitoring. Clearly defined and measurable operational goals, such as percentage reductions in cost/time/ defects, are cited as prerequisites for success. However, precise estimates of such improvements prior to implementation often prove difficult. This is further complicated by the fact that BPI is highly intertwined with supply chain. For most businesses, supply chain is essential for their core and support processes.

The supply chain is a business relationship linking an organization with its suppliers and customers vertically to improve competitiveness through improve flexibility, quality, cost control, and lead times [2]. Professionals of SCM establish the different operation which leads reducing in the costs, improved quality, time consumption, distribution of resources and improved delivery in purchasing of different items. The term SCM was surfaced in the 1980s, to elaborate the necessity of integration the processes of key business, from end users via basic suppliers. The main purpose of Supply Chain Management is that, corporations and companies involve itself in a supply-chain through the exchange of information about production capabilities and market fluctuations to minimize the cost and to ameliorate the business process to acquire the maximum profit. Supply chain management contains all parties, from first demand to the final customers, including the inventory control and procurement of logistics in the companies [3]. Supply chain professionals coordinate efforts to make sure that products meet delivery, quality and cost standards. SCM is the connection of different activities which is needed in transforming, purchasing, and to deliver products to the consumers via linkage of hardworking by the mediators, suppliers and providers of service Items that are bought and the processing to obtain those items which can affect all company's organizations.

The Council of SCM experts (2012) elaborates the supply chain management as the activities that are needed to transform, purchase and to deliver items to consumers via linkage among the mediators, suppliers, and service providers and through the integration of demand and supply management across and within the Departments of the company.

Performance of the SCM is the level to which purchased products deliveries, costs and performance of quality follow the mandatory standards [4]. Products for customers at acceptable quality, with competitive costs and on time delivery and effective supply chains added to better quality,

improved cost and improved customer service for the last consumer, by leaving the companies to be highly competitive [5]. Integration of departments between the selling and buying company organizations adds to the competitive advantage. When Supply Chain Management executives bring together organizations with conflicting priorities and goals, it leads to the occurrence of improvements in performance. Executives having authority of SCM should execute the effective communication with managers of supplier Companies and with supply chain organizations to improve SCM performance. How the supply chain process could be improved? Is the theme of this thesis by applying the business process [6].

NATURE OF THE SUPPLY CHAIN

The nature of the supply chain influences the background of the problem. Supply chains exist in all the industries and governmental organizations. Supply chains are integrated systems of organizations that link external suppliers and external customers with firms [7]. All supply chain deals with the challenges, objectives, planning, and strategies. At the same time. Logistics, procurement, inventory process these are the major tools all supply chain.

Leadership and Decision Making

Leadership and decision-making processes within the supply chain influence the background of the problem. Supply chain leaders must manage the integrated system by uniting the firm and its customers [8]. The leaders must inspire effective management of resources, foster relationships, and have involvement in product design, delivery of goods, and provision of services while creating favorable value for customers relative to the competition. Timely and rational decision making by leaders is critical to effective SCM. Institutional mechanisms that guide an organization's internal functions tend to influence decision making, which encourages common values, norms, and rules leading to common practices and organizational structures throughout the supply chain process. Academic institutions and professional and industry associations promote standards of conduct in supply chain process [9].

DIMENSIONS OF THE SUPPLY CHAIN MANAGEMENT PHILOSOPHY

There is tremendous competition in the markets. which are based globally, the increased expectations of customers and the introduction of products with short life cycles have compelled the businesses to make investments in the market and to put the attentions on the supply chains So, the professionals of the supply chain has experienced an increasing influence and period of rapid change. Many business and economic trends decide the requirements to expand the management directions from traditional operations to strategic viewpoint [10]. The SCM's impact on businesses is tremendous, especially when items are time-sensitive and time-critical. From a point of view of business, each extra added minute in the supply chain between consumer and shipper transforms directly into the lost and cost value [11]. Currently, a no. of factors proves it

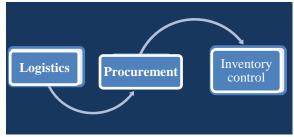
beneficiary for businesses to control and execute their supply chains at all tiers or levels. These scenario created in an increased number of new products, an increased demand for customized products, short product development cycles, efforts to reduce lead times and the adoption of quick response strategies. The cost of the businesses is determined by the efficient management of the supply chain.

SUPPLY CHAINS COMPLEXITY

Supply chains are dynamic and complex. It contains several fundamental uncertainties which may affect negative impact on the supply chain. For instance, late deliveries, substandard quality, inaccurate forecasts and break downs of equipment and changed or cancelled orders.

Logistics, Procurement and Inventory control tools of Supply Chain Process

Logistics, procurement and inventory control are the tools of the supply chain process. If we do not consider one of the factors among these the process will be incomplete or the process will not be accurate. But in every organization the process could be different. In modern supply chain these tools have the special importance now every organization is considering to make these department up to date according



to today's needs of the business. Logistics, procurement and inventory control are interrelated with each other's in supply chain process.

Figure 1 Fundamentals of Supply Chain Process

SUPPLY CHAIN MANAGEMENT

Lee & Corey said that Supply Chain Management contains activities of integration, which take place among a facilities network that procure raw goods, convert it into semi-prepared materials and in the end to finally desired products, and transport the goods to consumers via system of distribution [12]. Christopher stated its definition as the supply chain management is the organizations' network which is involved, via linkages of downstream and upstream in the different activities and processes which produces the value in the shape of services and products in the to end final consumer's hand [13].

Supply Chain Management is the "systematic and strategic coordination of the functions of traditional business and the tactics around the functions of business through the particular firm and around the businesses within a range of supply chain management. It is done for the improving purposes of the performance having long-term of the single

companies. The supply chain acts as a whole." On the other hand while separating the activities of supply chain in multiple companies while enabling the economies of scale and specialization. There are several important problems and issues that are needed to be solved for success of operation of supply chain, which is regarded as the main purport of the Supply Chain Management.

SYSTEM THEORY

In context of Supply Chain Management, System Theory bind with one another different complex supply chain's components (which are the human, information, capital, financial and materials resources etc.) to create the subsystem that is component of a bigger system or network of supply chains. This theory also provide the arguments that perspective of holistic System Theory should be hired to have the understanding of the external and internal factors that gives shape to an supply chain performance of an organization. A system may be taken related to anything that we may analyze, identify and discuss. A system is "set of definable components."[14]. For instance, the Internet is regarded as the computers' systems which are connected via switches, cables, and many other elements; and all of those components are taken as an independent entity as a itself whole systems. "Interrelated elements' set is regarded as a system in which every entity is related indirectly or directly to each next other entities and every subset of that system is related to every other subset." [15]. An elements' collection can be regarded as a particular context' system by the special observers. Behavior and Language affects the decisions on identification of a system. The concept of systems may be a handy way to think about the management job. It gives visualizing framework to visualize external and internal factors of environments that is fully integrated. It recognizes the appropriate function and place of the subsystems. The systems are necessarily complex through that businessmen should be operated. Management through the concepts of systems nurtures a thinking way that also helps out for dissolving the little complexity and, also assists the management to recognize the complex problems' nature and so, work through the perceived environment. It has taken importance for reorganization of the nature of integration of specific systems. It also includes the facts that every system has outputs and inputs. It may be visualized as a unit of self-contained feature. It has also taken importance for reorganization of the systems of business that are components of the larger systems, or including many different industries and/or companies, or also the whole society. In addition, systems of businesses are in a constant change state, they can be operated, created, eliminated and revised.

Using Systems Theory to Design and Manage the Supply Chain

Management benefits by viewing the supply chain as a system. By taking a systems view of the supply chain, attention is focused on the elements that are key to good system performance. The following benefits are achieved:

- 1. The key performance indicators are seen as key to the system achieving its objectives
- 2. The physical resource flows are identified and understood.
- The supply chain functions that facilitate the physical resource flow are identified and understood.
- 4. The interaction of the supply chain functions is made clear
- 5. Supply chain management is recognized as the control mechanism that adjusts system performance in order to achieve the desired system performance.
- 6. The importance is made clear of an information processor to gather data from the physical flow and from elements in the environment of the system, transform that data into information, and provide that information to management.
- 7. The key role is recognized of management decisions in adjusting the performance of the physical system in order to achieve the system objectives.

In summary, by viewing the supply chain as a system, management understands its task in designing and managing the system. Management clearly sees the importance of assembling a management team with the proper knowledge and skills, providing each of the supply chain functions with the resources that are required for them to function as subsystems, and assembling and maintaining the necessary virtual flows of data, information, and decisions that enable the supply chain to function as an open, closed-loop system.

PLANNING AS COMPETITIVE ADVANTAGE OF SCM

The planning processes play a vital role to secure the high levels of the development and firm performance of crucial capabilities [16].Indeed, the main purport of the given scheme & strategy is to elaborate and choose the special capabilities to execute the specific functions [17]. In this case, development of flexibility is effected by the contingency planning by action of processing of information and by the organization of resources [18]. The utilization of planning of contingency being a practice of organizational management is used to enhance the performance of supply chain that is analogous to the innovation adoption Alignment of supply chain management with organizational objectives. Each company and organization is operated to sustain the exerted forces that are produced by the environment. These forces of drive tend to forces the organizations to do continuous research for the development of novel strategies and processes to adapt the ever-changing environment of the businesses [19].

Harris and Mc Loughlin (1997) have also contributed that innovation should be realized by the successful organizations as the integral part of initiatives and practices of the management. The utilization of planning of contingency being a practice of organizational management is used to enhance the performance of supply chain that is analogous to the innovation adoption [20].

CONCLUSION

With the recent research in the field of management science and engineering, BPI has become the important factor for every organization. In this particular research, SCM is totally coordinated with the BPI because they meet with the basic principles of business which is time and resources. Time and resources directly affect the outcome of business. If the time and resources are using properly then it can be beneficial for the business.

REFERENCES

- Hill, CW. 2001. International business: competing in the global marketplace. 3 edition. New York: McGraw-Hill.
- 2. Zsidisin/Ragatz/Melnyk (2005b), p. 46. See Zsidisin/Melnyk/Ragatz (2005a)
- [Kevin McGuinness and Stephen Bauld]; Publication info: . c2010 (Saint-Lazare, Quebec: Canadian Electronic Library, 2011).
- 3. (Coyle, Langley, Bardi & Novack,, 2008) 736 pages; Publisher: South-Western College Pub; 8 edition (March 6, 2008)
- 4. Janvier-James, Assey Mbang, Donghua University, China. Vol 2, No 3 (2011)
- 5. Bridging the barriers to supply chain collaboration: an integrative theoretic model. SE Fawcett, AM Fawcett, BJ Watson, GM Magnan Academy of Management Proceedings 2010 (1), 1-6.
- 6. Alfalla-Luque & Medina-López, 2009; Carter, Sanders & Dong, 2008.

- 7. Cachon, 2004; Talluri et al., 2004; Betts and Johnston, 2005; Sodhi, 2005; Xiao and Yang, 2008; Radke and Tseng, 2012).
- 8. Melnyk, Fineout-Overholt, Feinstein, et al., 2004;. Melnyk, Fineout Overholt, et al., 2012; Titler, 2009).
- 2011 Apr 12;29(17):3329-34. doi: 10.1016/j.vaccine.2010.12.122.
 Epub2011 ... Tate JE(1), Kisakye A, Mugyenyi P, Kizza D, Odiit A, Braka F.
- 10. O'Marah K., "The Top 25 Supply Chains 2007", Supply Chain Management Review, Vol. 11.

ISSN: 1013-5316; CODEN: SINTE 8

- 11. Valodia I and Velia M (2006) Trading and training: Large manufacturing firms in the ... T. and Velia M. (2008) Impacts of prime-age adult mortality on labor supply.
- 12. Christopher M., Logistics & supply chain management: strategies for reducing costs and improving services (Pitman Publishing, London).
- 13. Dr. Randall Whitake Introductory Orientation Maturana, 1970: reprinted in Maturana & Varela, 1980,
- 14. F. E. Emery (editor), Systems thinking: selected readings, Penguin, 1981.
- 15. Bruce,H (1996) leverage your supply chain rechnology through synchronization automatic ID news april vol 12 5,p30.
- 16. Fawcett, S. E., Calantone, R. J., & Smith, S. (1996). An Investigation of the Impact of Flexibility on Global Reach and Firm Performance. Journal of Business Logistics, 17(2), pp 167.
- 17. Stalk Jr, G. (1988). Time--the Next Source of Competitive Advantage. Harvard Business Review, 66(4), pp 41-51.
- 18. Bowersox, D., Daugherty, P., Droge, C., Rogers, D., & Wardlow, D. (1989). Leading Edge Logistics Competitive Positioning for the 1990's. Oakbrook, ILL: Council of Logistics Management.
- 19. Ehigie, B. O. & McAndrew, E. B. (2005). Innovation, Diffusion and Adoption of Total.
- 20. McLoughlin, I. & Harris, M. (1997). Innovation, Organizational Change and Technology
- (1st ed.). London ; Boston: International Thomson Business Press.s